

POPULATION TODAY

Vol. 18, No. 6 June 1990

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PRB

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FROM THE EDITOR'S DESK

As the saga of the 1990 Census continues (see next page), some pundits have called for the data goals of the decennial census somehow to be accomplished by other, cheaper means.

Surveys, statistical adjustment, estimates, wholesale imputation, and privatization have been suggested as alternatives. And yet—were the census to be conducted solely as a mechanism for apportionment, you'd still need a 100-percent national head count, complete with giant address lists and enumerator armies.

This is true not only because the Constitution mandates a head count (not a survey), but to comply with the historic one-person, one-vote Supreme Court decisions pertaining to state legislatures, and also with civil rights law affecting apportionment of the House of Representatives. Compliance requires accurate data by race, ethnicity, and voting age, right down to the block level.

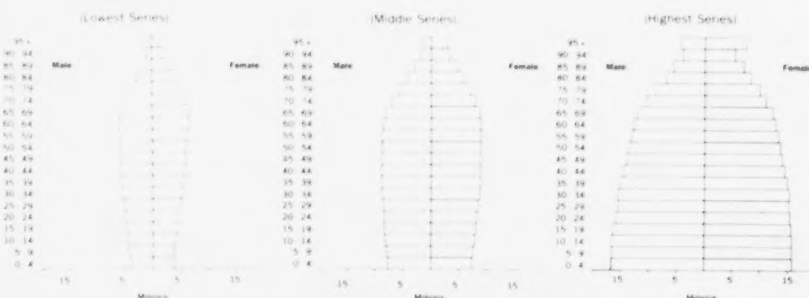
Why would you need data from tiny little blocks to apportion a great state? Well, suppose you wanted to divide a state of exactly 1 million people into two geographic halves with equal populations. To split that state so there are 500,000 people on either side of a dividing line necessitates very good population data broken down by very small areas. And the only way to obtain data of that quality is via a complete census. Accept no substitutes.

PRB demographer William O'Hare points out that reapportioning Congress requires even more exact geographic data than does state redistricting. The populations of congressional districts within the same state are supposed to be as nearly equal as possible. Even a 0.7-percent differential between districts was ruled excessive in a 1983 Supreme Court decision regarding New Jersey.

—Art Haupt

SPEAKING GRAPHICALLY

Assumptions Have Consequences



Above are population profiles of three Census Bureau projections of U.S. population in 2080. The lowest projection (185 million) presupposes a total fertility rate (TFR) of 1.5 and an annual net immigration of 300,000. The middle one (292 million) assumes 1.8 lifetime children and a net immigration of 500,000. The highest projection (501 million) presupposes a TFR of 2.2 and 800,000 annual net immigration. Life expectancy also varies—from about 78 years in the lowest to 88 in the highest. Even slight changes in assumptions can have large consequences 90 years down the road.

Source: U.S. Bureau of the Census, *Current Population Reports*, Series P 25, No. 1018

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Recycled Paper

PAA Trots Northward to Toronto

Over 1,100 PAAers temporarily migrated (or in-migrated) to Toronto for the annual meeting of the Population Association of America.

During May 3-5, on the shores of Lake Ontario, in the shadow of the CN Tower (1,821 feet tall), they gathered—to hear papers, chat in the corridors, do serious networking, and generally catch up on the state of Population—'90s Style.

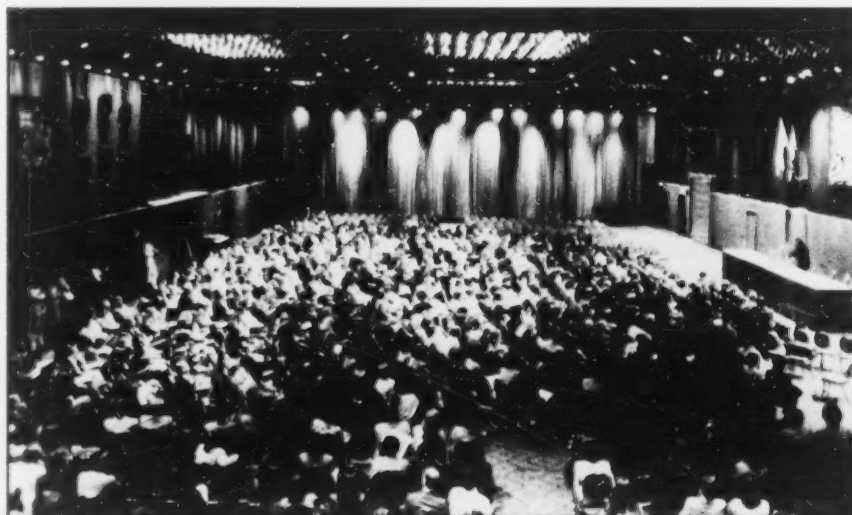
Sessions

U.S. Trends. A picture of growing individualism in the U.S. emerged from several papers presented in Arland Thornton's session on changing attitudes and norms affecting the family. Margaret Mooney Maroni (Univ. of Minnesota) found that the current emphasis on the autonomy and freedom of the individual is associated with withdrawal of allegiance from social groups and institutions, producing an increase in social tolerance but a decrease in social responsibility.

Eileen Crimmins (Univ. of Southern California) presented a paper, co-authored with Yasuhiko Saito and Richard Easterlin (also USC), with a similar theme, comparing the attitudes of U.S. high school seniors in 1976 and 1986. While seniors wanted slightly fewer children in 1986 (2.37 vs. 2.63), the desire to give children greater opportunities than they had, and to be good parents, increased.

These future parents are not concerned with giving their children more of their time, however, but more goods. Compared to 1976, high school seniors in 1986 were much more concerned with obtaining lots of money, material goods, and recreation time. Ethical or value-laden issues such as "finding purpose and meaning in life, or working to correct social injustices have lost some of their relevance to students over the past decade." Discussant Ron Lesthaeghe (Vrije Univ., Brussels) commented that this trend toward individualism and secularism was pervasive throughout modern society—in Europe as well as the United States.

David C. Rowe (Univ. of Arizona) and



PAAers hear Larry Bumpass's presidential address.

David F. Harris (Univ. of North Carolina) found that younger siblings are consistently more sexually active than older siblings, in both the white and black population, but not in the Hispanic. The study indicated that earlier physical maturation is one of the more strongly supported hypotheses to explain this finding.

Irv Garfinkel (Univ. of Wisconsin-Madison) thought that over the long term, the 1988 Family Support Act might help raise the income levels of families with children, but that immediate short-term gains were unlikely. Frank F. Furstenberg, Jr. (Univ. of Pennsylvania) argued that it is unlikely that the Act will substantially increase contact between fathers and their children, and Kristin Moore presented data from the National Longitudinal Survey of Youth showing that the legislation's aim to put AFDC mothers to work would face some stiff obstacles.

The AFDC population (as compared to other groups of women—those who were poor, but not on AFDC; mothers who were not poor; and nonmothers) tended to have lower educational levels, fewer skills, less work experience, low self-esteem, and more traditional views of female roles (i.e., to stay at home and take care of kids), Furstenberg said. In sum, the Family Support Act should not be expected

to save the nation's children from poverty or to recreate the happy American home.

Elaine Fielding (Univ. of Wisconsin) announced the results of a project which used 1980-1986 CPS studies and the 1985 American Housing Survey. The purpose was to analyze extent of black suburbanization in metro areas. Her results showed some evidence of racial convergence, despite a decline in black suburbanization during the 1980s. Also, national summary figures masked area-specific differences in city/suburb racial dissimilarity. Fielding gave Detroit, Los Angeles, and Washington, D.C. as examples.

James Fawcett (East-West Population Institute) et al. compared the skill levels and economic contributions of migrants admitted to the U.S. under two different preference systems: family and occupational. The implicit assumption of the two categories is that the former group is admitted for humanitarian reasons, while the latter is admitted for its potential economic contributions.

Excluding elderly parents and children of migrants, Fawcett found that the human resources and economic contribution indices (derived from an Immigrant Predeparture Assessment Survey) for those admitted in the

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Complete and Return Those Forms!

As if lawsuits and undercount adjustment weren't problems enough, the 1990 Census has a new one—the return rate.

Mail returns are down compared to previous censuses. As of April 23, 65 percent of forms mailed out had been returned, including late mail returns, according to the Census Bureau. This was 5 percentage points lower than the 70 percent originally hoped for.

By comparison, the 1980 Census had reached 75 percent, including late mail returns, as of April 16, 1980. The 1970 Census, the first full mail-in census, had a 78 percent return.

Although the census operation is alive and well, the news about the return rate was dismaying. Newspapers editorialized in terms of "the partial breakdown of the census" (*Washington Post*). And on April 27, President Bush made a special appeal "to urge every American who has not returned the census to do so, to stand up and be counted."

The good news is, low return rate or no low return rate, the Census Bureau is going to get its data. The heart of a decennial census is the comprehensive address rolls that pinpoint the country's 100 million or so dwelling units. Until a unit is checked off, it remains on the Bureau's to-do list, and enumerators will visit the unit three times, if necessary, to find the dwellers or at least to ascertain if they exist. Enumerators started conducting door-to-door followups on April 26.

The bad news is that each percentage point under the expected 70 percent will cost \$10 million. And meanwhile, Bureau specialists and other population watchers are scratching their heads and wondering what happened.

Despite well-publicized omissions—a California town that didn't receive forms, for example—the shortfall does not seem to be the Postal Service's fault. Delivery problems are estimated to account for no more than 3 million of the nonresponses.

Is the address list too good—incorporating every possible dwelling unit including vacant ones? This could

conceivably result in an inflated denominator from which the return rate is calculated; the vacancy rate around the country is estimated to be about 8 percent.

The most remarkable datum is that the nonresponse is reported to be even across the country: Urban is the same as rural, and there are essentially no differences between racial and socioeconomic groups, though black and Hispanic neighborhoods were estimated to have higher response rates than white neighborhoods.

So what happened? Until further data are available, speculation reigns. Some questions currently without answers:

- Did publicity about the census peak too soon? The greatest news coverage occurred during the March 20-21 homeless count, an operation that clearly fascinated the media. Census Day, April 1, 10 days later—the climax of a decade's preparation—received far less publicity.

65 percent
of census forms
have been
tallied

- Did people give up on their forms because advertisements made April 1 sound like the final deadline for mail back, instead of what it is, the starting gun?

- It's hard to quantify, but are people generally more strung out than they were in 1980?—in terms of being besieged by junk mail (which they may have mistaken the census packet for) and general lack of time?

- Has resentment against government intrusion increased? Is census nonresponse an expression of this resentment?

- Is the questionnaire itself (the same format as 1980) confusing or uninviting? The Census Bureau was locked into this format, which is

designed to be readable by the FOSDIC scanning machines. But 1990 is the last time around for FOSDIC, which will be replaced by more sophisticated equipment, and the forms in the 2000 Census should have a more inviting appearance.

Without question, the census process has become a remarkable font of controversy and news stories. Lawsuits from jurisdictions claiming they were undercounted in 1980 have dragged through the courts year after year. There was the 1988 battle between the Census Bureau and the Office of Management and Budget over the content and number of questions for 1990; then the turmoil over adjusting the numbers for undercount (far from over); then controversy over whether and how to count the homeless. And the start-up of a new decade's worth of lawsuits.

Now, post-Census Day 1990, the Bureau must now puzzle over the case of the curious nonresponse. It will probably surmount the present brouhaha, as it has others. But the historical trend suggests that the decennial census, once a relatively low-key operation, is growing, not only in importance, but in the level of dissension and disagreement it engenders.

How to improve the response rate? Counsel from all quarters has not been lacking. One suggestion is for a no-frills national head count coupled with a major survey. Another proposal is to mail out the census questionnaire as part of a U.S. Government sweepstakes with multimillion-dollar prizes—after all, if states have lotteries, can the Feds be far behind? "There's only one person qualified to manage such an undertaking," said a letter to the editor. "Ed McMahon."

If all this weren't enough, a small number of imposters falsely representing themselves as census enumerators have popped up in various states. And ultimately, 1990 may be remembered as the census when an enumerator was bitten by a respondent (in Alton, Ill.). It's been that kind of year.

—A.H.

The State of U.S. Children

During the transformations experienced in the U.S. in recent decades, no age group has been subject to more social and demographic changes than have the nation's 64 million children (those under 18 years).

How are they doing? PRB's latest *Bulletin*, "America's Children: Mixed Prospects," assesses the well-being of the present generation.

Today's children have fewer siblings than their forebears. They are more likely to live in a one-parent household, and their mothers are about as likely to work as stay home. These children's socioeconomic status has become more varied (relatively poor and rich), and overall they are more likely than adults to be living in an impoverished household.

Although there has been a transformation in many aspects of family life over the past generation, popular perception may have exaggerated the extent of social change. True, parental care has become less of an option today for many families because the mother works. But as of 1988, some 70-75 percent of preschool-age children were cared for primarily by their mother, father, or other relatives (rather than by child-care services).

Similarly, the phenomenon of latchkey children may be less widespread than generally supposed. The *Bulletin* reports a 1984 Census Bureau survey found some half-million children aged 5-14 years had to fend for themselves after school, a lower figure than expected.

For these and other socioeconomic trends, the *Bulletin* provides national statistics and estimates on issues that are usually the object of much interest and speculation.

—A.H.

Copies of the 44-page *Population Bulletin*, "America's Children: Mixed Prospects," by Suzanne M. Bianchi (Vol. 45, No. 1, May 1990), can be ordered from PRB, Circulation Dept., P.O. Box 96152, Washington, D.C. 20090-6152, with checks payable to PRB; or by calling (800) 877-9881. Visa and MasterCard accepted. Prices for the *Bulletin* are: \$7.00 a single copy; 2-10 copies, \$6.50 ea.; 11-50 copies, \$5.50 ea.; 51 or more, \$4.00 ea. Orders of \$50.00 or less must be prepaid and include \$1.00 or 3 percent of total order (whichever is greater) for postage and handling.

SURVEY REPORT

Trinidad and Tobago

The Trinidad and Tobago Demographic and Health Survey (TTDHS), conducted in 1987, represents the only survey of a Caribbean country included in Phase I of the Demographic and Health Program. Results of the survey show some of the changes in the health and fertility of the population which have occurred in the two-island nation since the World Fertility Survey (WFS) in 1977.

The total fertility rate (TFR) has declined slightly, from 3.3 lifetime children per woman in 1977 to 3.1 in 1987. Among women who are near the end of their childbearing years (age 40-49), the average number of children is 4.3, and thus is another indicator of a decline in fertility. The TFR varies according to ethnic group: at current rates women of African descent will have 3.4 children on average and East Indian women will have 2.7 children. (These two ethnic groups each make up about 40 percent of the islands' population of 1.2 million.)

A long history lies behind family planning in Trinidad and Tobago. The first clinic opened in 1956, and in 1961 the Family Planning Association of Trinidad and Tobago (FPATT) was founded. In 1967 the government began offering maternal and child health services in clinics throughout the country and formed a population council which advocated a reduction in the birth rate.

Thus, contraceptive prevalence reached fairly high levels over a decade ago, and has not changed much since then. Fifty-three percent of women in union were using contraception at the time of the survey, virtually the same proportion as found by the WFS in 1977 (52 percent). The pill and the condom are the

most widely used methods (14 percent and 12 percent, respectively), followed by female sterilization (8 percent), vaginal methods (5 percent), and the IUD (4 percent). Traditional methods, such as rhythm and withdrawal, are used by 8 percent of women in union.

East Indian women are more likely to use family planning than are African women (56 percent versus 49 percent), and Hindus and Catholics are more likely than other women to use a method (57 percent and 54 percent, respectively).

Most women who depend on clinic-based methods receive services at government health centers, while supply-method users are most apt to rely on pharmacies. The FPATT supplies about 15 percent of all family planning clients.

According to the TTDHS, 33 percent of women in union are estimated to be at risk of an unintended pregnancy because they do not want to become pregnant, but are not using contraception; only 13 percent say they intend to use a method in the future. Among sexually active women at risk, 21 percent say they are not using a method because of health concerns.

The infant mortality rate has declined substantially since 1976, from 47 deaths of children under age 1 per 1,000 live births to 26 deaths. Childhood mortality has similarly declined, from 7 deaths of children age 1-4 per 1,000 live births to 3 deaths. Contributing to these declines in mortality is the fact that for virtually all of the births in the five years prior to the survey, mothers received prenatal care and almost all had medical assistance at delivery.

—B.S.

Fig. 2. Total Fertility Rates and Contraceptive Prevalence



Toronto glimpses: an overhead projection, Friday night's Cornell table, a trio of demographers, Thomas Award winners Rebecca L.

PAA in Toronto

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family preferences category were roughly comparable to those admitted under occupational preferences. He concludes that families may in fact act as "gate keepers," encouraging only those with the necessary skills and adaptability to immigrate to the U.S.

Sherrie Kossoudji (Univ. of Michigan) described the "cat and mouse" pattern in the behavior of illegal immigrants apprehended by the U.S. Border Patrol. Those apprehended revealed an adjustment pattern in the number and length of their forays into the U.S. labor market. The patterns suggest that the much of the effort to apprehend illegal immigrants involves catching the same people over and over, and thus teaching them how to be more effective in avoiding apprehension the next time.

With women entering the U.S. labor force at record rates, many are wondering whether their longevity will be reduced. Ingrid Waldron (Univ. of Pennsylvania) examined this question using individual and ecological data and concluded that no such reduction is evident, nor are there harmful effects on the health of middle-aged or older working women. By contrast, Waldron said, occupational hazards to which men are exposed account for about 5 to 10 percent of the excess of male over female mortality.

The U.S. and Canada. Norman Ryder (Princeton Univ.) presented a historical analysis of U.S. and Canadian cohort fertility trends. Although Canadian fertility rates have typically been somewhat higher than those in the U.S., this pattern has now reversed. Both countries, however, display remarkably similar fertility

trends. Until the mid-1960s, period fertility tended to be higher than cohort fertility; now the reverse pattern is in evidence. Delayed childbearing and fewer higher order births have largely been responsible for fertility declines since 1970.

Ryder argued that because of social, economic, and cultural changes, it is unlikely that either the U.S. or Canada will replicate its post-World War II baby boom. However, current levels of immigration in both countries are sufficiently high (indeed, remarkably on target) to make up for any gap in cohort replacement fertility and will enable both countries to achieve a stationary population by next century if current trends continue.

World Trends. Young Hee Yoon (Rand Corporation, Santa Monica, Calif.) examined the generalization that urbanization and industrialization have had a dampening effect on female labor force participation around the world. He found that the type of development strategy makes an important difference. Import-substituting strategies, which promote heavy industry that often erects barriers to employment of women, are associated with declining participation. However, export-oriented strategies, which emphasize lighter industry (consumer electronics, for example) do not have the same depressing effect on women's participation in the labor market.

Frank Goza (Bowling Green Univ.) and Donald Sawyer (CEDEPLAR, Federal Univ. of Minas Gerais) reported that migration to the Brazilian agricultural frontier in the state of Rondonia has dropped off since the mid-1980s, when arrivals exceeded 10,000 per month. Once considered an agricultural "El Dorado" by impoverished peasants from

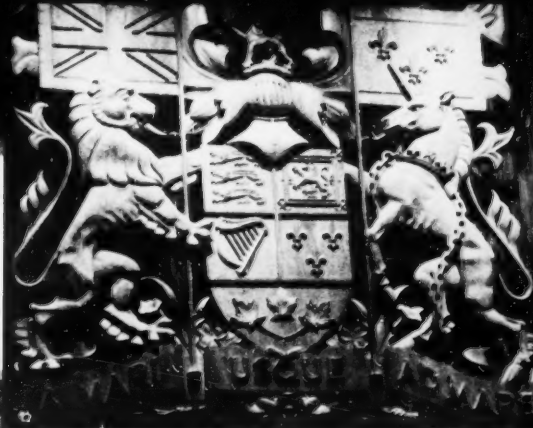
more densely settled regions, Rondonia is now much less attractive. Many migrants have left the state or moved to its rapidly growing cities.

John Bongaarts (Population Council) outlined a new approach to measuring "wanted births" that overcomes some of the biases in existing measures derived from survey data on desired fertility. The new measure builds on the concept of a "wanted total fertility rate" (TFR) but adjusts it for "last-wanted births" that appeared to bias the earlier measure downward. More refined measures of this sort are proving helpful in making fertility survey information more useful to policymakers and program managers.

Charles Westoff (Princeton Univ.) in a paper on reproductive intentions and fertility rates reported on his analysis of data from 133 national surveys in which reproductive intentions (as indicated by the proportion of women who want no more children) were found to explain 76 percent of the variance in fertility rates. Westoff concluded that women's reproductive intentions, acting through the intervening variable of contraceptive prevalence rate, have considerable predictive validity.

In a session on findings from the demographic and health surveys, two papers examined the data from several countries to assess birth interval and breastfeeding trends. Reporting on determinants of birth intervals in Sub-Saharan Africa, Judith Seltzer, Richard Cornelius, and Ellen Starbird (USAID), concluded that breastfeeding is the main variable reducing the risk of short birth intervals in Africa.

James Vaupel and Zeng Yi (Humphrey Institute, Univ. of Minn.) offered projections on different ways China could meet its population goals. For



Clark and Jane E. Miller (shown with presenter Frank Bean), PAA President Larry Bumpass addressing PAA, Canada's Lion and Unicorn.

example, to have a target size population but slower growth in the proportion over age 65, China could adopt a two-child family policy with child-bearing starting at age 30.

Addressing the inconsistency between TFRs and contraceptive prevalence, Donald Adamchak (Kansas State Univ.) and Michael Mbizvo (Univ. of Zimbabwe) compared Zimbabwe's high contraceptive prevalence rate of 43 percent in 1988 with its equally high TFR of 5.7 children per woman. Such high TFRs would normally be associated with a contraceptive prevalence rate of 23 percent. Their findings indicate that there is an extensive overlap between contraceptive use after last birth and postpartum amenorrhea, rendering a high percentage of contraceptive use redundant or ineffective.

Wolfgang Lutz (International Institute for Applied Systems Analysis) recounted the effects of public policy changes on fertility levels in East and West Germany. While policies directly aimed at achieving replacement level fertility are difficult to implement, there are many public policies that can have a strong, though indirect, effect on fertility levels.

For example, in 1972 East Germany passed a liberalized abortion policy and its TFR took a decided plunge. However, passage in 1976 of extended paid maternity leave, targeted particularly at working women with two or more children, pushed up fertility rates, particularly for higher order births.

Population projections for a united Germany were presented. If current East German fertility levels are assumed, then the total population size for a united Germany would be 69.2 million in 2030, compared to 78

million today. On the other hand, if West German fertility levels apply, total population will decline to 60.6 million by 2030. Because East Germany keeps more detailed demographic information than West Germany, demographers would hope that a united Germany will follow the East German statistical tradition.

AIDS. Frances Chevarley and Harry Rosenberg (National Center for Health Statistics) presented first results of 1987 deaths from HIV infection based on NCHS's new classification for AIDS that takes into account the disease's mortality impact regardless of immediate cause of death.

In 1987 there were 13,468 deaths from AIDS in the U.S. White males aged 25-44 accounted for the largest absolute number of deaths, while black males of the same age had the highest rates. AIDS was among the top five causes of death for both these groups. Hispanic AIDS mortality rates, based on data from those states where death records code Hispanic ethnicity, appear to fall between the white and black rates.

Barbara Boyle Torrey and Peter Way (Center for International Research, U.S. Bureau of the Census) reported on the available survey data covering HIV seroprevalence in Africa as of Winter 1990. According to the still-sketchy data sources, AIDS remains largely an urban disease, but the epidemic may be most severe in certain rural Central African regions. The age profile for HIV-1 and HIV-2 cases seems quite distinct. HIV-2, possibly due to a longer latency period, strikes a noticeably older population. HIV-2 seroprevalence has been associated with West Africa but new evidence suggests high rates in Mozambique as well.

The 1990 Census. Reynolds Farley (Univ. of Michigan) discussed his analysis of responses to an open-ended question on ancestry asked in the 1980 Census. He found ancestry reporting among blacks, Hispanics, and recent (first and second generation) immigrants to be consistent with responses given to Census items on race and Spanish origin. Many later generation European groups, however, were likely to report two or more ancestries, no ancestry, or an "American" ancestry. His evidence suggested ancestry as less salient for these third and higher generation whites than for racial groups and recent immigrants. Farley predicted no rise in the listing of "American" as an ancestry in the 1990 Census.

Charles Jones (U.S. Bureau of the Census) issued a "progress report" on the 1990 Census. He stressed many positive developments with the Census despite its problems (such as the low response to mail questionnaires and the necessity of hiring more enumerators which resulted). As examples of such happenings, he included administrative actions to attract qualified enumerators; the increased accuracy of mailing lists; the use of computerized TIGER maps; and the success of "Shelter and Street Night" in March. Jones predicted that the 1990 Census ultimately will be successful. When asked about the low response rate and its implications, he stated his belief that the low rate was due more to apathy than to anger with the government.

Business and Applied Demography. As Laurence Rosen (Michigan Dept. of Management and Budget) noted in his remarks at the session, the topic choice was

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influenced by nagging concerns regarding applied demographers' place in the PAA. Diverse opinions discussed by the panel—which included David Swanson (Pacific Lutheran Univ.), Julia Martin (Univ. of Virginia), Linda Gage (California Dept. of Finance), Mike Batutis (U.S. Bureau of the Census), and Hallie Kintner (General Motors Research Labs)—ranged from forming an Applied Demography group separate from the PAA to involving applied demographers more in PAA affairs.

Martin, in stating her preference for a separate Applied Demography group, noted that her duties have moved away from technical demography and into other concerns, including administration and dealings with the public, media, and politicians—concerns having no reference to the PAA. Kintner, on the other hand, listed three ways in which applied demographers can take a more active role in the PAA: improving communication with the PAA Board (such as making *Applied Demography* an official PAA publication); fostering the professional development of applied demographers; and actively promoting demography as a profession. These measures, she stated, would increase PAA's membership and prestige. The floor discussion continued along this theme and included talks on the unresolved issue of certification for demographers.

Three papers described the evolution and content of applied demography degree programs at Georgetown and Bowling Green Universities. The papers focused on the importance and difficulty of setting up effective internship programs to complement the academic side of the program and on dealing with the academic politics of starting a new program. Two more papers by former students now working in applied settings emphasized the importance of keeping things flexible for applied students and helping them to understand how to communicate with real-world clients. The discussant, Stephen Tordella (PRB's Decision Demographics), elaborated on key differences

between the way reports should be presented for academic and nonacademic audiences.

Awards Night

Late Friday afternoon saw the presentation of the Dorothy S. Thomas Award, for the best graduate student papers on migration or economic-demographic-social interrelations. Awardees were Rebecca L. Clark (Urban Institute, Washington, D.C.), for her paper "Does Welfare Affect Migration?"; and Jane E. Miller (Office of Population Research, Princeton Univ.), for her paper "Birth Spacing and Perinatal Health: A Comparison of Three Hypotheses."

The Mindel C. Sheps Award, given every other year for outstanding contribution to mathematical demography or demographic methodology, was presented to Kent Manton (Duke Univ.).

After the awards, Ronald Freedman (Univ. of Michigan), who presided over

Divorce rates have changed accepted ideas of family life

the evening's festivities, introduced PAA President Larry L. Bumpass (Univ. of Wisconsin-Madison), who addressed the packed ballroom on "What's Happening to the Family? Interactions Between Demographic and Institutional Change."

Bumpass examined the state of the U.S. family, expanding upon themes of the past few PAA presidential addresses. The modern family, Bumpass reminded his audience, is the result of centuries-old trends, and both pro- and antinatalist forces.

High divorce rates have fundamentally changed family life in America, said Bumpass. As many as 60 percent of today's newlyweds may divorce. This reality has robbed marriage of its aura of permanence: encouraging more young women to plan careers; relaxing the stigma of out-of-wedlock births and cohabitation; and holding down birth rates. This lack of confi-

dence in marriage may be self-fulfilling: If marriage is perceived as a shaky institution, couples may be less willing to fully commit themselves to it.

Changes in attitudes about the family, Bumpass asserted, often lag behind changes in actual social behavior. As one prime example: Between the 1960s and 1980s, a dramatic increase in employment of mothers with young children occurred despite a strong, and pervasive, common belief that preschool children were harmed by having their mothers work outside the home. Yet research (by Saito, Crimmons, and Esterlin; see page 4) has also suggested that the new generation of parents would rather give their children material goods than parental time.

Given all this, can the family survive? Bumpass's presidential address dismisses the question. The real enigma, he said, concerns what the family will be like in the future. In the meantime, society's task is to try to ameliorate the negative effects of current trends on families rather than attempt to reverse the tide of change itself.

PAA Sidebars

Oversized, elegant, mysterious, the Royal York was like a cheerful version of the luxury resort hotel in the supernatural movie *The Shining*. The elevators' destination buttons had a particularly steep learning curve: A, M, MM, C, CM, 1, 2, 3... (where M signified the street-level floor).

That said, it should be added that the Royal York's rooms were exceptionally spacious and elegant. And the Friday night alumni party (the replacement for the now-squelched suite parties of the past) in the ballroom seemed quite festive this year.

Toronto also was refreshing. Canada's largest city (3.4 million population) seemed a happy community where a multi-ethnic citizenry lives harmoniously under clear skies, cheering at Blue Jays games when they're not riding on shiny red streetcars or strolling down sidewalks that have literally just been scrubbed down with soap—a novelty for those south of the border.

The Saturday of the annual Fun Run

dawned chilly and a bit damp, which might account for the low number of participants. There were only seven hardy souls at the starting line, with a sex ratio of 600.

This year's run was planned by ex-PAA President Farley, who had scouted the area and, in a spasm of creativity, mapped a route that included a 10-minute ferry ride to Toronto Island Park. The ferry (blessedly heated) took the runners to the peaceful paths of the placid park, and 30 minutes or so were spent jogging two or more miles along the main path of the island (which has no private cars). The view of the Toronto waterfront from the ferry, a rainbow arching over the city, swallows, doves, and other birds going about their morning business, the invigorating air, and the good company all combined to make the run one of the most enjoyable ever and certainly a high point of the 1990 meeting.

A brief compilation of PAA one-liners:

One unidentified demographer to another, aboard one of those elevators: "I have nightmares of someone, one hundred years from now, attempting to trace his family's genealogy only to find out that his great grandfather was imputed in the 1990 Census."

Discussant Randy Bulatao (World Bank): "Once more, demographic-transition theory has been subjected to the slings and arrows of outrageous regressions."

Ed Pryor (Statistics Canada): "George Washington wasn't happy about the 1790 Census total of 3.9 million. He thought it should be 4 million. I believe the case is still before the courts. . . ."

In every year following a U.S. decennial census, the PAA meets in Washington, D.C. Next year will be no exception.

—compiled by Cary Davis, Alex de Sherbinin, Carol de Vita, Judy Felt, Robert Gardner, Thomas Godfrey, Art Haupt, Mary M. Kent, Thomas W. Merrick, William O'Hare, Kelvin Pollard, Stephen Tordella, and Nancy Yinger

SOFTWARE

Future Population is a cohort-component population projection program that can import population data and then project the year-by-year demographic parameters and distribution as they change over time. It can output these projections by years of age or by five-year groupings, as well as corresponding basic age-sex pyramids.

Up to three population subgroups may be included in the data, and fertility, mortality, and migration rates can vary across different periods of the projection as the user determines.

The program is designed to

accept ASCII data files created by the user. It also comes with sample files for Iran in the 1950s and Egypt and the U.S. in the 1980s.

Future Population is available from National Collegiate Software of Duke University Press, 6697 College Station, Durham, N.C. 27708. Phone (919) 684-6837. Price: \$25.00; site license and lab pack prices available on request. The Clearinghouse distributes various social-science and humanities-oriented PC software authored by university faculty across the country.

—A.H.

POPULATION UPDATE

Estimated United States Population:

As of March 1, 1990	250,474,000
As of March 1, 1989	247,935,000

The above estimates include armed forces overseas and are from U.S. Bureau of the Census, *Current Population Reports*, Series P-25, No. 1056.

Estimated World Population:

As of June 1990	5,313,000,000
Annual growth	93,000,000

Extrapolated from the mid-1990 population on PRB's 1990 *World Population Data Sheet*.

Latest Provisional Statistics for the U.S.: January 1990

Item	12 months ending with January					
	Number		Rate			
	1990	1989	1990	1989	1988	1987
Live births	4,040,000	3,919,000	16.3	15.9	15.7	15.5
Deaths	2,169,000	2,169,000	8.7	8.8	8.8	8.7
Natural increase . . .	1,871,000	1,750,000	7.6	7.1	6.9	6.8
Marriages	2,409,000	2,386,000	9.7	9.7	9.9	9.9
Divorces	1,159,000	1,188,000	4.7	4.8	4.8	4.8
Infant deaths	39,000	38,600	9.7	9.9	10.0	10.4
Population base (in millions)			248.5	245.8	243.5	241.1

Note. Rates are given per 1,000 population, except for infant deaths, which are given per 1,000 live births.

Source. *Monthly Vital Statistics Report* (Vol. 39, No. 1) from the National Center for Health Statistics.

TAKE A NUMBER

U.S. Ethnic Numbers: For the first time ever, the Census Bureau has issued detailed post-censal race and ethnic estimates for the United States. The *Current Population Reports* edition entitled "United States Population Estimates by Age, Sex, Race, and Hispanic Origin: 1980 to 1988" tracks the growth of ethnic population since the 1980 Census by age and sex. Overall, those under 30 years continue to be a minority in the country. The median age has now risen to 32.3; this measure will continue to rise as the baby boomers progress up the age ladder. But the real news in this report is the ethnic information. Annual estimates of the larger groups such as whites, blacks, and Hispanics had been published on a regular basis, but the inclusion of "other races" now rounds out the picture. No longer must we rely on 1980 data for a full breakdown. The various groups, along with the changes since 1980 are shown at right.

Among the groups, the Asian and Pacific Islander (API) population manifested the most spectacular growth, rising from 3.8 to 6.5 million in just eight years. Some of that growth was, however, fueled by refugee immigra-

July 1, 1988 Population: Incl. Armed Forces Overseas (in 1,000s)

Ethnicity	1988	1980	% change
White	207,748	195,571	6.2
Black	30,326	26,903	12.7
Asian/Pacific Islander	6,529	3,834	70.3
American Indian, Eskimo, or Aleut	1,699	1,429	18.9
Hispanic*	19,852	14,803	34.1

*Hispanics may be of any race.

tion in the early part of the decade. The growth rate for API's, in fact, dropped from 9.1 percent in 1980-1981 to 5.5 percent in 1987-1988.

What's Going On With U.S. Fertility?: Is the U.S. experiencing a real rise in its birth rate or is the present trend merely an aberration? The birth rate for January 1990 was 15.5 per 1,000

population compared to 14.8 for the same month in 1989. And as shown in "Population Update" on the preceding page the 12-month rate, ending in January 1990, was 16.3, noticeably higher than the 15.9 for January 1989. While we don't want to attach too much importance to short-term trends, the U.S. birth rate definitely bears watching. . . .

—C.H.

ADDENDA

Grin and Bear It, by Wagner

Clarification

Contrary to what the April 1990 PT reported in the article, "Israel New Home for Soviet Jews," Israel's occupied territories (mainly the West Bank and Gaza) were occupied in the 1967 (not the 1973) Middle Eastern war. Furthermore, East Jerusalem is not an occupied territory, since it was claimed by, and formally annexed into, Israel after that war.



"Well then, how about a rough estimate, madam?"

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CURRENT READINGS

PRB welcomes materials on population topics for possible inclusion in *Current Readings*. Publishers may address review copies to Book Review Editor, *POPULATION TODAY*, Population Reference Bureau, 777 14th St., N.W., Washington, D.C. 20005.

A HUMAN MOSAIC: An Atlas of Ethnicity in Los Angeles County, 1980-1986, by David M. Heer and Pini Herman. Panorama City, Calif.: Western Economic Research Co., 1990. 266 pages. \$200.00.

This book provides statistical data for each of the 1,644 census tracts in Los Angeles County. For each census tract, slightly reconfigured 1980 Census data and 1986 estimates are provided for 20 different groups based on race/ethnicity and nation of birth. The 1986 estimates rely on birth and death records for each census tract. Results are presented in tables and displayed on a census tract map of Los Angeles County. Also, the book contains a convenient transparent overlay which shows the location of major municipalities within the county.

As the authors acknowledge, "Most demographers would have shied away from attempting to estimate postcensal populations of census tracts by detailed ethnicity." The reason for this, as the authors indicate, is the large errors typically associated with such estimates. Clearly, the estimates in this book will contain substantial errors. The question is whether the 1986 estimates provide a more accurate reflection of the tract characteristics than the 1980 data.

Some of the definitions used in this publication differ somewhat from conventional Census Bureau definitions. For example, the authors define anyone under age 15 as foreign born if that person's mother was foreign born.

Aside from the enormous amount of statistics contained in

the book, perhaps the most striking feature of this publication is its \$200 price tag.

Putting cost aside, I think this book might be of interest to three types of people. First, anyone interested in small-area data for Los Angeles County. Second, anyone who might be interested in producing similar books for other metro areas might find this to be a useful model. Third, those interested in small-area estimates might be interested in the methodological portions of this study.

—William O'Hare

YEAR BOOK OF LABOUR STATISTICS RETROSPECTIVE EDITION ON POPULATION CENSUSES, 1945-89, by the International Labor Office. Geneva, Switzerland: ILO, 1990. 1,059 pages. \$119.00 hardbound. ISBN 92-2-006428-6

The International Labor Organization (ILO) introduces a special edition of the *Year Book of Labour Statistics*. This retrospective *Year Book* contains statistical information on the economically active population for 184 countries, areas, and territories. The data are compiled by sex and age group; by industry, employment status, and sex; and by industry, occupation, and sex. The statistics date back to 1945 and are derived from over 559 population censuses.

The International Labor Organization was formed in 1921 to collect information on the issues concerning the changing industrialization and labor patterns of the world. The *Year Book of Labour Statistics* evolved from a sparse collection of tables and text on cost of living, wages, and unemployment, into a full Appendix in 1933 and a separate volume in 1934. In 1935-36 the *Year Book of Labour Statistics* became an independent publication.

Since 1945, ILO has collected

statistical information on labor from an ever-growing number of countries; population census data have always been a major component of the data presented. This publication will be invaluable to those studying trends in industrial development.

—Kim Crews

THE ORIGINS OF AUSTRALIA'S CAPITAL CITIES, edited by Pamela Statham. Sydney, Australia: Cambridge University Press, 1989. 364 pages. ISBN 0-521-36242-3.

The population distribution of Australia presents a unique case study in "city primacy" that is largely due to the way in which the country was settled. This engrossing history of the cities' development is filled with many details on their founding and emergence as the dominant settlements in their territories.

Australians like to characterize their country in terms of the outback or bush, but the land "down under" has been highly urbanized from the start. The capital cities were "instant cities," created for specific purposes and largely subsidized by direct funding from England. Their demographic dominance is evidenced by the almost complete lack of medium-sized urban places between the metropolitan capital and the smallest towns.

The growth of these cities was unlike that in other areas of the New World. They did not evolve as a result of a natural rural to urban migration process, but grew primarily by the immigration of those with urban backgrounds. Australia's cities not only developed ahead of the rural zones, but even before those areas were investigated. The result of this upside-down process defines the Australia of today.

—Carl Haub

SPOTLIGHT

SWAZILAND

Population (mid-1990 est.): 800,000
Land area: 6,704 sq. miles
Population density: 119 per sq. mile
Births per 1,000 pop.: 46
Deaths per 1,000 pop.: 13
Rate of natural increase: 3.1 percent
Total fertility rate: 6.2 children per woman
Infant mortality rate: 130 infant deaths per 1,000 live births
Life expectancy: 50 years
GNP per capita (1988 est.): \$790
Capital: Mbabane

by Gwenda Brophy

Swaziland, one of the smallest countries in Africa, is a landlocked country bordering South Africa and Mozambique. Relatively ethnically homogenous, in the last decade it has experienced substantial immigration of Mozambican refugees. The population of around three-quarters of a million is mainly rural, with a quarter of the population living in urban areas.

The economy has a dualistic nature, a traditional, mainly subsistence farming sector, and a modern sector with large agro-industries—sugar, wood and pulp, fruit canning, mining for coal and asbestos, and a small but well-established tourist trade. There are close economic ties with South Africa—Swaziland is a member of the South African Customs Union which facilitates the free movement of goods between Swaziland and South Africa, Botswana, and Lesotho, and is also part of the Rand monetary area.

In terms of demographic indicators, Swaziland experiences higher-than-average male mortality relative both to females and to children; it is believed that this may be related to the high number of males who work in mining and the associated hazards,



A census undertaken in 1986 and a Family Health Survey in 1988 reported a total fertility rate of 5 children per woman, although the Census Office believes this is an underestimate. Urban fertility is lower at 3.5, and rural 5.4. Childbearing takes place in a wide range of union types—marriage by civil ceremony or by Swazi custom, consensual and visiting arrangements; polygamous unions are also in evidence.

In 1973, family planning services were introduced through Ministry of Health facilities. While contraceptive prevalence was estimated in 1985 at only 4 percent, the 1988 survey found an overall prevalence level of 17 percent (28 percent in urban areas; 13 percent in rural areas). Female education level was the biggest determinant of contraceptive use—34 percent of the most highly educated women were users, compared to only 10 percent of women with no education. These groups make up around 10 percent and 20 percent of the female population, respectively.

Issues associated with population

and family planning remain politically and culturally sensitive. The Family Life Association of Swaziland provides population information and education programs to parliamentarians and chiefs, covering major factors of population growth and development.

The population growth rate of 3.1 percent per year is among the highest in Sub-Saharan Africa. The economy, already finding difficulty in absorbing the growth in the labor force—a consequence of past high fertility—will face a dramatic increase in the supply of labor in the 1990s, and the formal sector will find it impossible to absorb more than a fraction of them.

Public education extolling the benefits of family planning has also been pursued with target groups such as clinic attendees, younger women, women's groups, and men. The men are commanding increasing attention for their role in reproductive behavior. Their traditional opposition to family planning is believed to inhibit many women adopting family planning, and to make many others "surreptitious" users.

The increasing spread of sexually transmitted diseases in the country is causing new concern. Employer-based distribution projects have been established which focus on the distribution of condoms, and knowledge of condoms is high (90 percent among urban men and 75 percent among rural men). The urgency of encouraging condom use may rise if the numbers of reported AIDS cases continue to grow as they have during the last few years.

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